

Notice of Allowability

Application No.

09/614,326

Examiner

Thai-An N Ton

Applicant(s)

EDELBERG ET AL.

Art Unit

1632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/22/03.
2. ☒ The allowed claim(s) is/are 69-74.
3. ☒ The drawings filed on 7/12/00 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.
5. ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

7. ☒ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| <ol style="list-style-type: none"> 1 <input type="checkbox"/> Notice of References Cited (PTO-892) 2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3 <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No. <u>3/6/01</u> 4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | <ol style="list-style-type: none"> 5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6 <input checked="" type="checkbox"/> Interview Summary (PTO-413), Paper No. <u>3/17/04</u> 7 <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8 <input type="checkbox"/> Examiner's Statement of Reasons for Allowance 9 <input type="checkbox"/> Other |
|--|---|

Deborah Crouch
DEBORAH CROUCH
PRIMARY EXAMINER
GROUP 18007

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Doreen Hogle on March 17, 2004.

The application has been amended as follows:

In the claims:

1. Replace claim 69 with following:

69. A method of transiently upregulating heart rate in a mammal by introducing at least one fetal or embryonic cardiomyocyte transfected or transduced with at least one gene that upregulates heart rate, said gene selected from the group consisting of: β_2AR , β_1AR , and $G_{\alpha s}$, wherein expression of the at least one gene in the transduced cardiomyocytes results in transiently upregulating heart rate in said mammal.

2. Replace claim 70 with the following:

70. A method of upregulating heart rate in a mammal by introducing a construct comprising at least one gene selected from the group consisting of: β_2AR , β_1AR , and $G_{\alpha s}$, wherein the at least one gene is operably linked to a promoter, and wherein said construct is suitable

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for localized stable gene expression in mammalian cardiac atrial tissue, and wherein said construct is introduced by direct myocardial injection or direct endocardiac transfection or transduction, and expression of said construct results in upregulating heart rate in the mammal.

3. Replace claim 71 with the following:

71. The method of claim 70, wherein the promoter comprises an inducible promoter.

4. Cancel claim 75.

Oath/Declaration

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because it does not contain the signature of Jay Edelberg.

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Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Thaian N. Ton whose telephone number is (571) 272-0736. The Examiner can normally be reached on Monday through Friday from 8:00 to 5:00 (Eastern Standard Time), with alternating Fridays off. Should the Examiner be unavailable, inquiries should be directed to Amy Nelson, Acting SPE of Art Unit 1632, at (571) 272-0804. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CM1 Fax Center number is (703) 872-9306.

TNT

Thaian N. Ton
Patent Examiner
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